IN THE CLAIMS:

Please amend the claims as set forth below:

1-73. (Cancelled)

74. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing the semi-conductor substrate to provide a first porous layer adjacent the surface having a first porosity;

anodizing the semi-conductor substrate to provide a second porous layer adjacent the first porous layer opposite the surface, said second porous layer having a second porosity greater than said first porosity;

forming a semi-conductor film on the first porous layer; and

separating the semi-conductor film from the semi-conductor substrate at a porous layer consisting of the first and second porous layers.

75. (Previously Presented) The method according to claim 74 wherein said separating is performed along a line of relative weakness defined in or adjacent said second porous layer.

76. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

forming a first porous layer adjacent said surface having a first porosity;

forming a second porous layer adjacent said first porous layer having a second porosity higher than said first porosity;

forming a semi-conductor film on said surface; and

separating said semi-conductor film from said semi-conductor substrate.

77. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

forming a first porous layer adjacent said surface having a first porosity;

forming a second porous layer having a second porosity higher than said first porosity;

forming a semi-conductor film on said surface; and

separating said semi-conductor film from said semi-conductor substrate.

78. (Cancelled)

79. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing the semi-conductor substrate at a current density that is changed to provide a first porous layer adjacent the surface having a first porosity, a second porous layer adjacent the first porous layer opposite the surface, the second porous layer having a

second porosity greater than the first porosity, and a third porous layer adjacent the second porous layer, the third porous layer having a third porosity different from said second porosity;

forming at least one semi-conductor film on the surface and first porous layer; and

separating the semi-conductor film from the semi-conductor substrate at the layer of the first through third porous layers having the highest porosity.

80. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor having a surface;

anodizing the semi-conductor surface at a first current density;

anodizing the semi-conductor substrate at a second current density higher than said first current density, thereby to provide a first porous layer adjacent the surface having a first porosity, a second porous layer adjacent the first porous layer opposite the surface; the second porous layer having a porosity greater than the first porosity; and a third porous layer having a porosity different than said second porosity;

forming at least one semi-conductor film on the surface and the first porous layer; and

separating the semi-conductor film from the semi-conductor substrate along a line of relative weakness defined in the layer having the highest porosity.

81. (Currently Amended) A method as defined in claim 79, wherein in said anodizing ~~step~~ conducted to provide said first, second and third porous layers, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said current density that is changed.

82. (Previously Presented) A method as defined in claim 80, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first and second current density, respectively.

83. (Previously Presented) A method as defined in claim 81 or 82, wherein the electrolytic solution comprises hydrogen fluoride and a hydrocarbon alcohol.

84. (Currently Amended) A method as defined in claim 81, wherein in the anodizing ~~step,~~ conducted to provide said first, second and third porous layers, the composition of the electrolytic solution used is the same.

85. (Previously Presented) A method as defined in claim 82, wherein in the anodizing steps, the composition of the electrolytic solution used in each anodizing step is the same.

86. (Currently Amended) A method as defined in claim 81, wherein in the anodizing ~~step,~~ conducted to provide said first, second and third porous layers, the composition of the electrolytic solution used varies.

87. (Previously Presented) A method as defined in claim 82, wherein in the anodizing steps, the composition of the electrolytic solution used in the anodizing steps varies.

88. (Previously Presented) A method as defined in claim 79, further comprising the step of annealing the semi-conductor substrate in a hydrogen atmosphere after the anodizing step and before the forming step.

89. (Previously Presented) A method as defined in claim 80, further comprising the step of annealing the semi-conductor substrate in a hydrogen atmosphere after the anodizing steps and before the forming step.

90. (Previously Presented) A method as defined in claim 88, further comprising the step of oxidizing the anodized substrate after the anodizing step and before the hydrogen annealing step.

91. (Previously Presented) A method as defined in claim 89, further comprising the step of oxidizing the anodized substrate after the anodizing steps and before the hydrogen annealing step.

92. (Previously Presented) A method as defined in claim 79 or 80, wherein in the forming step the semi-conductor film is epitaxially grown.

93. (Previously Presented) A method as defined in claim 79 or 80, wherein the semiconductor substrate is a single crystal silicon substrate.

94. (Previously Presented) A method as defined in claim 79 or 80, wherein the semiconductor substrate is an impurity-doped semi-conductor substrate.

95. (Previously Presented) A method as defined in claim 79 or 80, further comprising the step of attaching a support substrate to the semi-conductor film after the forming step and before the separating step.

96. (Previously Presented) A method as defined in claim 95, wherein the support substrate is a rigid substrate.

97. (Previously Presented) A method as defined in claim 95, wherein the support substrate is a flexible substrate.

98. (Previously Presented) A method as defined in claim 95, wherein the support substrate is attached to the semi-conductor film by bonding.

99. (Previously Presented) A method as defined in claim 79, wherein in said anodizing step, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current that is changed and wherein in the anodizing step, the electrolytic solution is the same.

100. (Previously Presented) A method as defined in claim 80, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first and second current density, respectively, and wherein in the anodizing steps, the electrolytic solution is the same.

101. (Previously Presented) A method as defined in claim 79, wherein in said anodizing step, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current that is changed and wherein the electrolytic solution used in the anodizing step varies.

102. (Previously Presented) A method as defined in claim 80, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first and second current density, respectively, and wherein the electrolytic solution used in the anodizing steps varies.

103. (Withdrawn) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing said semi-conductor substrate at a current density that is changed to provide a first porous layer adjacent said surface having a first porosity and a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing said semi-conductor substrate in a hydrogen atmosphere after said step of anodizing said semi-conductor substrate to provide said second porous layer; and

forming at least one semi-conductor film on said surface.

104. (Withdrawn) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing said semi-conductor substrate in a hydrogen atmosphere after said step of anodizing said semi-conductor substrate to provide said second porous layer; and

forming at least one semi-conductor film on said surface.

105. (Previously Presented) A method as defined in claim 103 further comprising a step of separating said at least one semi-conductor film from said semi-conductor substrate.

106. (Previously Presented) A method as defined in claim 104 further comprising a step of separating said at least one semi-conductor film from said semi-conductor substrate.

107. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

forming a first porous layer adjacent said surface having a first porosity;

forming a second porous layer within said first porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor film on said surface; and

separating said semi-conductor film from said semi-conductor substrate.

108. (Cancelled)

109. (Cancelled)

110. (Previously Presented) A method as defined in claim 109, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first, second and third current density, respectively.

111. (Previously Presented) A method as defined in claim 110 wherein the electrolytic solution comprises hydrogen fluoride and a hydrocarbon alcohol.

112. (Previously Presented) A method as defined in claim 110, wherein the anodizing steps, the composition of the electrolytic solution used in each anodizing step is the same.

113. (Previously Presented) A method as defined in claim 110, wherein the anodizing steps, the composition of the electrolytic solution used in the anodizing steps varies.

114. (Previously Presented) A method as defined in claim 109, further comprising the step of annealing the semi-conductor substrate in a hydrogen atmosphere after the third anodizing step and before the forming step.

115. (Previously Presented) A method as defined in claim 114, further comprising the step of oxidizing the anodized substrate after the third anodizing step and before the hydrogen annealing step.

116. (Previously Presented) A method as defined in claim 109, wherein in the forming step the semi-conductor film is epitaxially grown.

117. (Previously Presented) A method as defined in claim 109, wherein the semi-conductor substrate is a single crystal silicon substrate.

118. (Previously Presented). A method as defined in claim 109, wherein the semi-conductor substrate is an impurity-doped semi-conductor substrate.

119. (Previously Presented) A method as defined in claim 109, further comprising the step of attaching a support substrate to the semi-conductor film after the forming step and before the separating step.

120. (Previously Presented) A method as defined in claim 119, wherein the support substrate is a rigid substrate.

121. (Previously Presented) A method as defined in claim 119, wherein the support substrate is attached to the semi-conductor film by bonding.

122. (Previously Presented) A method as defined in claim 109, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first, second and third current density, respectively, and wherein in the anodizing steps, the electrolytic solution is the same.

123. (Previously Presented) A method as defined in claim 109, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first, second and third current density, respectively, and wherein the electrolytic solution used in the anodizing steps varies.

124. (Withdrawn) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing in a hydrogen atmosphere after said step of anodizing to provide said second porous layer; and

forming at least one semi-conductor film on said surface.

125. (Withdrawn) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing said semi-conductor substrate after said step of anodizing said semi-conductor substrate to provide said second porous layer; and

forming at least one semi-conductor film on said surface.

126. (Withdrawn) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing said semi-conductor substrate in a hydrogen atmosphere after said step of anodizing said semi-conductor substrate to provide said second porous layer; and

forming at least one semi-conductor film on said surface.

127. (Previously Presented) A method as defined in claim 124, 125 or 126 further comprising a step of separating said at least one semi-conductor film from said semi-conductor substrate.

128. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

forming a first porous layer adjacent said surface having a first porosity;

forming a second porous layer within said first porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor film on said surface; and

separating said semi-conductor film from said semi-conductor substrate.

129. (Previously Presented) A method for making a semiconductor film comprising the steps of:

providing a semi-conductor substrate having a surface;

forming a porous layer adjacent said surface, the porous layer comprises a first porous layer having a first porosity and a second porous layer having a second porosity higher than said first porosity and a third porous layer having a third porosity different from said second porosity;

forming at least one semi-conductor film on said surface; and

separating semiconductor film from said semi-conductor substrate.

130. (Previously Presented) The method as claimed in claim 129, wherein said first porous layer is formed by anodization.

131. (Previously Presented) The method as claimed in claim 129, wherein said second porous layer is formed by anodization.

132. (Previously Presented) The method as claimed in claim 129, wherein said third porous layer is formed by anodization.

133. (Previously Presented) The method as claimed in claim 129, further comprising the step of:

after said porous layer forming step and prior to said semi-conductor film forming step, annealing said semi-conductor substrate in a hydrogen atmosphere.

134. (Cancelled)

135. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

forming a first porous layer having a first porosity on a surface of a substrate;

forming a second porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor thin film on said surface; and

separating said semi-conductor film from said substrate along a line of relative weakness defined in or adjacent one of said first and second porous layer,

wherein said first porous layer and said second porous layer are formed by anodizing.

136. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

forming a first porous layer having a first porosity on a surface of a substrate;

forming a second porous layer within or underneath said first porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor thin film on said surface; and

separating said semiconductor film from said substrate along a line of relative weakness defined in or adjacent one of said first and second porous layers.

137. (Withdrawn) A thin film semi-conductor formed by:

providing a semi-conductor substrate having a surface;

forming a first porous layer having a first porosity on a surface of said substrate;

forming a second porous layer within or underneath said first porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor thin film on said surface; and

separating said semi-conductor film from said substrate along a line of relative weakness defined in or adjacent one of said first and second porous layers to obtain said thin film semi-conductor,

wherein said first porous layer and said second porous layer are formed by anodizing.

138. (Withdrawn) A thin film semi-conductor formed by:

providing a semi-conductor substrate having a surface;

forming a first porous layer having a first porosity on a surface of said substrate;

forming a second porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor thin film on said surface; and

separating said semi-conductor film from said substrate along a line of relative weakness defined in or adjacent one of said first and second porous layers to obtain said thin film semi-conductor,

wherein said first porous layer and said second porous layer are formed by anodizing.

139. (Withdrawn) A thin film semi-conductor formed by:

providing a semi-conductor substrate having a surface;

forming a first porous layer having a first porosity on a surface of said substrate;

forming a second porous layer within or underneath said first porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor thin film on said surface; and

separating said semi-conductor film from said substrate along a line of relative weakness defined in or adjacent one of said first and second porous layers to obtain said thin film semi-conductor.

140. (Withdrawn) A thin film semi-conductor formed by:

providing a semi-conductor having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing said semi-conductor substrate in a hydrogen atmosphere after said step of anodizing said semi-conductor substrate to provide said second porous layer; and

forming at least one semi-conductor film on said surface.

141. (Withdrawn) A thin film semi-conductor formed by:

providing a semi-conductor having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

forming at least one semi-conductor film on said surface.

142. (Withdrawn) A thin film semi-conductor formed by:

providing a semi-conductor substrate having a surface;

forming a first porous layer adjacent said surface having a first porosity;

forming a second porous layer within said first porous layer having a second porosity higher than said first porosity;

forming at least one semi-conductor film on said surface; and

separating said semi-conductor film from said semi-conductor substrate along a line of relative weakness defined in or adjacent one of said first and second porous layers.

143. (Cancelled)

144. (Cancelled)

145. (Previously Presented) A method as defined in claim 144, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first and second current density, respectively, and wherein the electrolytic solution comprises hydrogen fluoride and an alcohol.

146. (Previously Presented) A method as defined in claim 144, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first and second current density, respectively, and

wherein in the anodizing steps, the composition of the electrolytic solution used in each anodizing step is the same.

147. (Previously Presented) A method as defined in claim 144, wherein in said anodizing steps, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current at said first and second current density, respectively, and wherein in the anodizing steps, the composition of the electrolytic solution used in the anodizing steps varies.

148. (Previously Presented) A method as defined in claim 144, further comprising the step of annealing the semi-conductor substrate in a hydrogen atmosphere after the anodizing steps and before the separating step.

149. (Previously Presented) A method as defined in claim 148, further comprising the step of oxidizing the anodized substrate after the anodizing steps and before the hydrogen annealing step.

150. (Previously Presented) A method as defined in claim 144, wherein the semi-conductor substrate is a single crystal silicon substrate.

151. (Previously Presented) A method as defined in claim 144, wherein the semi-conductor substrate is an impurity-doped semi-conductor substrate.

152. (Previously Presented) A method as defined in claim 144, further comprising the step of attaching a support substrate to the semi-conductor substrate before the separating step.

153. (Previously Presented) A method as defined in claim 152, wherein the support substrate is attached to the semi-conductor substrate by bonding.

154. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing the semi-conductor substrate at a first current density to provide a first porous layer adjacent the surface having a first porosity;

anodizing the semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent the first porous layer opposite the surface, the second porous layer having a second porosity greater than the first porosity;

anodizing the semi-conductor substrate at a third current density different from said second current density to provide a third porous layer adjacent the second porous layer, the third porous layer having a third porosity different from said second porosity; and

separating an upper portion of the semi-conductor substrate from the semi-conductor substrate along a line of relative weakness defined at the layer of the first through third porous layers having the highest porosity;

wherein said anodizing step, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current, and wherein in the anodizing steps, the electrolytic solution is the same.

155. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing the semi-conductor substrate at a first current density to provide a first porous layer adjacent the surface having a first porosity;

anodizing the semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent the first porous layer opposite the surface, the second porous layer having a second porosity greater than the first porosity;

anodizing the semi-conductor substrate at a third current density different from said second current density to provide a third porous layer adjacent the second porous layer, the third porous layer having a third porosity different from said second porosity; and

separating an upper portion of the semi-conductor substrate from the semi-conductor substrate along a line of relative weakness defined at the layer of the first through third porous layers having the highest porosity,

wherein in said anodizing step, the semi-conductor substrate is contacted by an electrolytic solution and exposed to a flow of current, and wherein the electrolytic solution used in the anodizing step varies.

156. (Withdrawn) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

anodizing said semi-conductor substrate at a first current density to provide a first porous layer adjacent said surface having a first porosity;

anodizing said semi-conductor substrate at a second current density higher than said first current density to provide a second porous layer adjacent said first porous layer opposite said surface, said second porous layer having a second porosity greater than said first porosity;

annealing said semi-conductor substrate in a hydrogen atmosphere after said step of anodizing said semi-conductor substrate to provide said second porous layer.

157. (Previously Presented) A method for making a thin film semi-conductor comprising the steps of:

providing a semi-conductor substrate having a surface;

forming a first porous layer adjacent said surface having a first porosity;

forming a second porous layer within said first porous layer having a second porosity higher than said first porosity; and

separating an upper portion of said semi-conductor substrate from said

semi-conductor substrate along a line of relative weakness defined in or adjacent said second porous layer.

158. (Cancelled)

159. (Cancelled)